



Attorney Docket No. 50277-1755

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Wayne Smith, et al.)	Confirmation No.: 3517
Serial No.: 10/006,605)	Examiner: Nguyen, Merilyn P.
Filed on: December 5, 2001)	Group Art Unit No.: 2161

For: **OBJECT-ORIENTED MATERIALIZED VIEWS**

Mail Stop RCE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Enclosed is a copy of Information Disclosure Citation Form PTO-1449 together with copies of the documents cited on that form, if needed. It is respectfully requested that the cited documents be considered and that the enclosed Information Disclosure Citation Form PTO-1449 be initialed by the Examiner to indicate such consideration and a copy thereof returned to applicant(s).

Pursuant to 37 C.F.R. § 1.97, the submission of this Information Disclosure Statement is not to be construed as a representation that a search has been made and is not to be construed as an admission that the information cited in this statement is material to patentability.

Pursuant to 37 C.F.R. § 1.97, this Information Disclosure Statement is being submitted under one of the following (as indicated by an "X" to the left of the appropriate paragraph):

X 37 C.F.R. §1.97(b).

 37 C.F.R. §1.97(c). If so, then this Information Disclosure Statement includes one of the following:

 A statement pursuant to 37 C.F.R. §1.97(e)

 1.97(e)(1) The undersigned hereby states that each item of information contained in this information disclosure statement was first

cited in communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this information disclosure statement.

1.97(e)(2) The undersigned hereby states that no item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in this information disclosure statement was known to any individual designated in §1.56(c) more than three months prior to the filing of this information disclosure statement.

A check for \$180.00 for the fee under 37 C.F.R. § 1.17(p).

37 C.F.R. §1.97(d). If so, then this Information Disclosure Statement includes the following:

A statement pursuant to 37 C.F.R. §1.97(e)

1.97(e)(1) The undersigned hereby states that each item of information contained in this information disclosure statement was first cited in communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this information disclosure statement; OR

1.97(e)(2) The undersigned hereby states that no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in §1.56(c) more than three months prior to the filing of this information disclosure statement.

AND

A check for \$180.00 for the fee under 37 C.F.R. §1.17(i) for submission of the Information Disclosure Statement.

37 C.F.R. §1.97(i). Wherein applicants are submitting references before the grant of a patent to be placed in the file but not considered by the Patent office.

(1) Accordingly, copies of the references as listed on the attached Form PTO 1449 are submitted herewith for placement in the file. No certification or fees are deemed necessary.

Throughout the pendency of this application, please charge any additional fees, including any required extension of time fees, and credit all overpayments to deposit account 50-1302.

Respectfully submitted,

HICKMAN PALERMO TRUONG & BECKER LLP

Dated: April 6, 2005



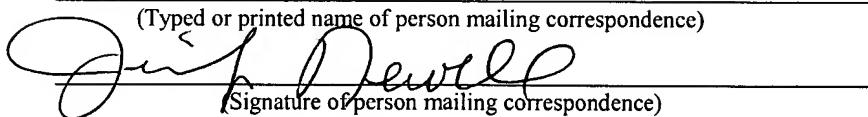
Marcel K. Bingham
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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage in an envelope addressed to Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on
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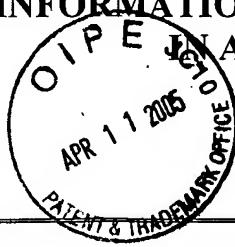
Jennifer Newell

(Typed or printed name of person mailing correspondence)



(Signature of person mailing correspondence)

INFORMATION DISCLOSURE CITATION
JAPAN APPLICATION
(PTO-1449)



ATTY. DOCKET NO.
50277-1755

SERIAL NO.
10/006,605

APPLICANT:
Wayne Smith et al.

FILING DATE:
December 5, 2001

GROUP:
2161

U.S. PATENT DOCUMENTS

Exam. Initial*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (If known)			
		5,261,098		Katin et al.	11-09-1993	(text provided on CD-ROM)
		5,276,870		Shan et al.	01-04-1994	(text provided on CD-ROM)
		5,404,506		Fujisawa et al.	04-04-1995	(text provided on CD-ROM)
		5,418,946		Mori	05-23-1995	(text provided on CD-ROM)
		5,444,842		Bentson et al.	08-22-1995	(text provided on CD-ROM)
		5,548,755		Leung et al.	08-20-1996	(text provided on CD-ROM)
		5,551,027		Choy et al.	08-27-1996	(text provided on CD-ROM)
		5,560,005		Hoover et al.	09-24-1996	(text provided on CD-ROM)

FOREIGN PATENT DOCUMENTS

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		Office ³	Number ⁴	Kind Code ⁵ (If known)				

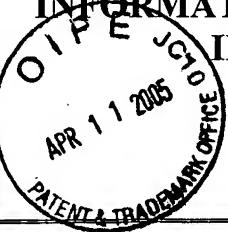
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¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard S.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

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 INFORMATION DISCLOSURE CITATION IN AN APPLICATION (PTO-1449)	ATTY. DOCKET NO. 50277-1755	SERIAL NO. 10/006,605
	APPLICANT: Wayne Smith et al.	
	FILING DATE: December 5, 2001	GROUP: 2161
	U.S. PATENT DOCUMENTS	

Exam. Initial*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (If known)			
		5,581,758		Burnett et al.	12-03-1996	(text provided on CD-ROM)
		5,584,024		Shwartz	12-10-1996	(text provided on CD-ROM)
		5,594,899		Knudsen et al.	01-14-1997	(text provided on CD-ROM)
		5,598,559		Chaudhuri	01-28-1997	(text provided on CD-ROM)
		5,600,831		Levy et al.	02-04-1997	(text provided on CD-ROM)
		5,659,728		Bhargava et al.	08-19-1997	(text provided on CD-ROM)
		5,701,455		Bhargava et al.	12-23-1997	(text provided on CD-ROM)
		5,724,575		Hoover et al.	03-03-1998	(text provided on CD-ROM)

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		Number	Kind Code ² (If known)			
		5,729,730		Wlaschin et al.	12-17-1998	(text provided on CD-ROM)
		5,734,884		Eberhard et al.	03-31-1998	(text provided on CD-ROM)
		5,765,147		Mattos et al.	06-09-1998	(text provided on CD-ROM)
		5,774,692		Boyer et al.	06-30-1998	(text provided on CD-ROM)
		5,778,355		Boyer et al.	07-07-1998	(text provided on CD-ROM)
		5,812,840		Shwartz	09-22-1998	(text provided on CD-ROM)
		5,822,751		Gray et al.	10-13-1998	(text provided on CD-ROM)
		5,826,077		Blakeley et al.	10-20-1998	(text provided on CD-ROM)

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		Number	Kind Code ² (If known)			
		5,832,485		Chaudhry	11-03-1998	(text provided on CD-ROM)
		5,848,405		Norcott	12-08-1998	(text provided on CD-ROM)
		5,873,093		Williamson et al.	02-16-1999	(text provided on CD-ROM)
		5,875,447		Goel et al.	02-23-1999	(text provided on CD-ROM)
		5,897,632		Dar et al.	04-27-1999	(text provided on CD-ROM)
		5,950,210		Nelson	09-07-1999	(text provided on CD-ROM)
		5,956,706		Carey et al.	09-21-1999	(text provided on CD-ROM)
		5,960,426		Pirahesh et al.	09-28-1999	(text provided on CD-ROM)

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		Number	Kind Code ² (If known)			
		5,960,427		Goel et al.	09-28-1999	(text provided on CD-ROM)
		5,963,933		Cheng et al.	10-05-1999	(text provided on CD-ROM)
		5,970,482		Pham et al.	10-19-1999	(text provided on CD-ROM)
		5,974,407		Sacks	10-26-1999	(text provided on CD-ROM)
		5,974,416		Anand et al.	10-26-1999	(text provided on CD-ROM)
		5,978,788		Castelli et al.	11-02-1999	(text provided on CD-ROM)
		5,978,791		Farber et al.	11-02-1999	(text provided on CD-ROM)
		5,987,455		Cochrane et al.	11-16-1999	(text provided on CD-ROM)

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		Number	Kind Code ² (If known)		
		5,991,754		Raitto et al.	11-23-1999
		6,003,022		Eberhard et al.	12-14-1999
		6,006,216		Griffin et al.	12-21-1999
		6,023,695		Osborn et al.	02-08-2000
		6,032,144		Srivastava et al.	02-29-2000
		6,088,705		Lightstone et al.	07-11-2000
		6,108,651		Guha	08-22-2000
		6,125,360		Witkowski et al.	09-26-2000

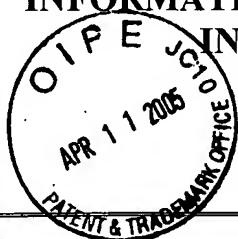
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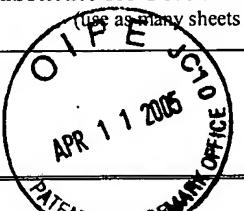
Substitute for Form 1449A/PTO (Modified) Use as many sheets as necessary		Attorney Docket No.: 50277-1755	Application Number: 10/006,605	
		First Named Inventor: Wayne Smith		
		Filing Date: December 5, 2001		
OTHER ART – NO PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published		Translation ²
		http://www.research.att.com/conf/vldb98/program.html, Mar. 2001		
		http://www.research.att.com/conf/vldb98, Mar. 2001.		
		Bello et al., "Materialized Views in Oracle", VLDB '98, Proceedings of 24th International Conference on Very Large Data Bases, Aug. 24-27, 1998, New York City, New York, USA, pp. 659-664.		
		Tanjar et al., "Aggregate-join query processing in parallel database systems"; May 14-17, 2000; High Performance Computing in the Asia-Pacific Region, 2000, Proceedings, The Fourth International Conference/Exhibition on, vol. 2, pp. 824-829.		
		Proietti et al., "Analysis of range queries and self-spatial join queries on real region datasets stored using an R-tree"; Sep.-Oct., 2000; Knowledge and Data Engineering, IEEE Transaction, vol. 12, Issue 5, pp. 751-762.		
		Najjar et al., "Cardinality estimation of distributed join queries"; Sep. 1-3, 1999; Database and Expert Systems Applications, 1999, Proceedings, Tenth International Workshop on, pp. 66-70.		
		Chaudhuri, Surajit et al., "Optimizing Queries with Materialized Views", Proceedings of the Eleventh International Conference on Data Engineering, Mar. 6-10, 1995, pp. 190-200.		
		Gopalkrishnan, Vivekanand et al., "Issues of Object-Relational View in Data Warehousing Environment", 1998 IEEE International Conference on Systems, Man, and Cybernetics, Oct. 11-14, 1998, vol. 3, pp. 2732-2737.		
		Kuno, Harumi et al., "Augmented Inherited Multi-Index Structure for Maintenance of Materialized Path Query Views", Proceedings of the Sixth International Conference on Research Issues in Data Engineering, Feb. 26-27, 1996, pp. 128-137.		

Examiner Signature		Date Considered	
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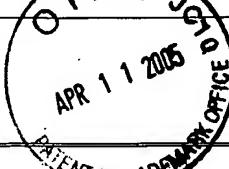
Substitute for Form 1449A/PTO (Modified) <small>Use as many sheets as necessary</small>		Attorney Docket No.: 50277-1755	Application Number: 10/006,605	
		First Named Inventor: Wayne Smith		
		Filing Date: December 5, 2001		
OTHER ART - NO PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published		Translation ²
		Segev, Arie et al., "Maintaining Materialized Views in Distributed Databases", Proceedings of the Fifth International Conference on Data Engineering, Feb. 6-10, 1989, pp. 262-270.		
		Bhargava, Gautam et al., "Hypergraph based reorderings of outer join queries with complex predicates", Proceedings of the 1995 ACM SIGMOD International Conference on Management of Data and Symposium on Principles of Database Systems", May 22-25, 1995, AC		
		Bhagrava, Gautam et al., "Efficient processing of outer joins and aggregate junctions", Proceedings of the Twelfth International Conference Data Engineering, 1996., 26-Feb. – 1 March 1996, pp 441-449.		
		Biggs, Maggie, "Oracle8 still in pole position", InfoWorld, Framingham; Dec 15, 1997, Volume 19, Issue 50, Page 1, 97, ISSN: 01996649.		
		Chen, Arbee, "Outerjoin Optimization in Multidatabase Systems", Proceedings of the Second International Symposium on Databases in Parallel and Distributed Systems, 1990, July 2-4 1990, pp 211-218.		
		Pang, HweeHwa et al., "Partially Preemptible Hash Joins", Proceedings of the 1993 ACM SIGMOD international conference on Management of data, 1993, pp 59-68		
		Ross, Kenneth et al., "Materialized view maintenance and integrity constraint checking: trading space for time", Proceedings of the 1996 ACM SIGMOD international conference on Management of data, June 3-6, 1996, pp 447-458.		
		O'Neil et al., "Multi-Table Joins Through Bitmapped Join Indices", SIGMOD Record, Vol. 24, No. 3, Sep 1995, pp 8-11.		
		Yan, Weipeng et al., "Performing Group-By before Join", Proceedings of the 10 th International Conference on Data Engineering, 1994, 14-18 Feb. 1994, pp 89-100.		

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		First Named Inventor: Wayne Smith	
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OTHER ART – NO PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Translation ²
		Lee, Byung Suk et al., "Outer joins and filters for instantiating objects from relational databases through views", IEEE Transactions on Knowledge and Data Engineering, Feb 1994, Vol. 6, Issue 1, pp 108-119	
		Lo, Ming-Ling et al., "Spatial Hash-Joins", Proceedings of the 1996 ACM SIGMOD International Conference on Management of Data, 1996, pp 247-258.	
		Marek, Robert et al., "TID Hash Joins", Proceedings of the third international conference in Information and knowledge management, 1994, No 2-, Dec 2, 1994, pp 42-49.	
		Mishra, Priti et al., "Join Processing in Relational Databases", ACM Computing Surveys, Vol. 24, No. 1, March 1992, pp 63-113.	
		Liu et al., "Derivation of incremental for nested relations", Database Conference, 2001, ADC 2001, Proceedings, 12th Australasian, Jan. 2001, pp. 76-82.	
.		Moro et al., "Incremental maintenance of multi-source views", Database Conference, 2001, ADC 2001, Proceedings, 12th Australasian, Jan. 2001, pp. 13-20.	
.		Ling et al., "A model for evaluating materialized view maintenance algorithms", Web Information Systems Engineering, 2000, Proceedings of the First International Conference on, vol. 1, Jun. 2000, pp. 374-382.	
		Jajoda et al., "Polyinstantiation integrity in multilevel relations"; May 7-9, 1990; Research in Security and Privacy, 1990, Proceedings, 1990 IEEE Computer Society Symposium on, pp. 104-115.	
		Strocker et al., "Integrating semi-join-reducers into state-of-the-art query processors"; Apr. 2-6, 2001; Data Engineering 2001, Proceedings 17th International Conference on, pp. 575-584.	

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